

tryptophan, tyrosine, and valine; X₃ can be asparagine or glutamine; X₄ can be serine, threonine, or alanine; and X₅ can be histine, lysine, or arginine.

Applicants respectfully note that the present application is a national stage application that entered the United States under 35 U.S.C. § 371. As set forth in 37 C.F.R. §§ 1.475 and 1.499, unity of invention practice, not restriction practice, applies in the instant application. In the Election Requirement, the Examiner cited 35 U.S.C. § 121, which is applicable to restriction practice, in laying out a requirement for election among subgenera and species. The Examiner also stated that “Groups {19, 20} and 18 are related as combination and subcombination, or alternatively Groups 18 and {19, 20} as related as mutually exclusive species in intermediate-final product relationship.” The Examiner subsequently cited M.P.E.P. §§ 806.05(c), 806.04(b), and 806.04(h), which describe the guidelines for restriction practice.

The provisions for unity of invention differ from the provisions for restriction practice. Annex B of the Administrative Instructions under the Patent Cooperation Treaty (submitted herewith as Exhibit A) provides further details on unity of invention.

Applicants respectfully submit that under unity of invention practice, groups 18, 19, and 20, would not be considered “combination and subcombination,” as that refers to combinations of different types of claims, for example product and process claims. (See section (e) of Annex B.)

The situation governing intermediate and final products is described in section (g) of Annex B, and specifies that “unity of invention shall be considered to be present in the context of intermediate and final products where the following two conditions are fulfilled: (A) the intermediate and final products have the same essential structural element... and (B) the intermediate and final products are technically interrelated, this meaning that the final product is manufactured directly from the intermediate or is separated from it by a small number of intermediates all containing the same essential structural element.”

Applicants respectfully submit that the above two conditions are met by groups 18, 19 and 20. Group 18 encompasses methods using polypeptides having an amino acid sequence comprising a chlorotoxin subunit sequence. Group 19 encompasses methods using such polypeptides, wherein the polypeptides are linked to a cytotoxic agent. Group

20 encompasses methods using such polypeptides, wherein the polypeptides are labeled. All groups have the same essential structural element, that is, a chlorotoxin subunit whose sequence is defined in claim 42. If polypeptides comprising chlorotoxin that are either linked to a cytotoxic agent (Group 19) or are labeled (Group 20) are considered, for the purposes of this analysis, “final products” and if polypeptides comprising chlorotoxin subunits that are not labeled or linked to a cytotoxic agent (encompassed, among other things, in Group 18) are considered, for purposes of this analysis, “intermediates,” then the final products can be manufactured directly from the intermediates or are separated from the intermediates by a small number of intermediates, all containing the same essential structural element. Furthermore, labeled polypeptides comprising chlorotoxin subunits and polypeptides comprising chlorotoxin subunits that are linked to a cytotoxic agent are interrelated in that they are separated by a small number of intermediates all containing the same essential structural element.

Applicants submit that the claims as written are linked by a unifying inventive concept, that is, methods using polypeptides comprising chlorotoxin subunits having sequences as defined in claim 42. Applicants therefore respectfully request that the Examiner proceed with substantive examination of the application.

Notwithstanding the foregoing, in case the Examiner disagrees that unity of invention practice is appropriate in this case, Applicants offer the following comments with respect to the Election Requirement as levied by the Examiner. In the interest of guiding examination and in recognition that the Examiner has invested time and effort in Election Requirements, Applicants are hereby making elections *with traverse* on grounds discussed above.

In a prior Election Requirement mailed February 14, 2008, the Examiner had defined subgenus G1 to be “limited to a method of altering the course of a biochemical process, either *in vivo* or *in vitro*; included would be a method of inhibiting proliferation of tumor cells.” In the response to the Election Requirement filed on March 13, 2008, Applicants had elected group 14, drawn to a method limited to G1. In the Election Requirement mailed May 14, 2008, the Examiner added “the proviso that methods of treating diseases are excluded, and with the further proviso that diagnostic methods are excluded.” In the telephonic interview of July 21, 2008, Applicants’ representative

expressed concern over these provisos, which had not been included in the Election Requirement mailed February 14, 2008.

Applicants further respectfully submit that methods of treating diseases and diagnostic methods are not mutually excludable from methods of altering biochemical processes.

As discussed in the telephonic interview and clarified by the Examiner, the claims as currently written, and the elected group 14 (subgenus G1), do not exclude methods of treatment or diagnosis.

The Examiner clarified that the present Election Requirement was mailed as a temporary measure to limit subsequent proliferation of the claims. Applicants understand that this is an election requirement, not a restriction requirement. Applicants also understand that the Examiner may issue a new and/or different Restriction or Election requirement in the future if claim proliferation does occur.

Applicants provisionally elect, *with traverse* on the grounds discussed above, group 18, which comprises claims 42-47, limited to altering the course of a biochemical process, either *in vivo* or *in vitro*. This subgenus includes, among other things, a method of inhibiting proliferation of tumor cells.

Applicants provisionally elect, *with traverse* on the grounds discussed above, the following species:

- d) a cancer cell for the specific cell type
- e) cell proliferation for the specific biochemical process
- f) subgenera G5, in which substituent variable X₁ is limited to aspartic acid or glutamic acid, in accordance with the claims filed 1/24/08 and with the description of the specification as originally filed (see page 10 of the specification as originally filed).
- g) (i) in the elected method, the polypeptide is contacted with the cells *in vivo*
- h) Intravenous for the route of administration
- i) TDHQMARS (SEQ ID NO:10) for the specific and fully defined polypeptide in which all amino acids are accounted.

Applicant reserves the right to pursue claims to non-elected species and subgenera upon allowance of a generic claim.

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CORRESPONDENCE ADDRESS

Please note that a Request for Change of Attorney Docket Number and Correspondence Address and a combined Revocation of Previous Powers of Attorney and Appointment of New Power of Attorney were submitted to the USPTO on May 12, 2006. Applicant therefore respectfully requests that all future correspondence in the above-captioned case be sent to:

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Respectfully submitted,

Dated: August 1, 2008

/Brenda Herschbach Jarrell, Ph.D./
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